Fullscript

Fullscript-tested

Assessing collagen purity

At Fullscript, we're committed to independently testing products we distribute to provide quality assurance and validate important safety and efficacy label claims.

As part of our commitment to quality, we selected various products distributed by Fullscript to test for potency and/or purity claims. Based on US and Canadian industry guidelines, Fullscript's Medical Advisory Team defined USP purity standards as the qualifying benchmark for quality confirmation.

Learn more about Fullscript's commitment to quality.

About collagen

Collagen is the most abundant structural protein in the human body, comprising approximately 30% of total protein content. It is primarily located in connective tissues such as skin, tendons, cartilage, and bones, where it provides mechanical strength and elasticity. Collagen is composed of three polypeptide chains forming a triple helix, rich in glycine, proline, and hydroxyproline. (Silvipriya 2015)

Oral collagen supplementation typically includes hydrolyzed collagen peptides (collagen hydrolysate), gelatin, or undenatured type II collagen (UC-II), each with distinct structural and clinical profiles. Hydrolyzed collagen is absorbed in the small intestine as di- and tri-peptides, which may stimulate fibroblast activity and increase dermal extracellular matrix components such as elastin and hyaluronic acid. (Osawa 2018)

Clinically, collagen supplementation has been associated with support for skin elasticity and hydration, (Proksch 2013) joints, (Liu 2018) and bone mineral density in postmenopausal women. (König 2018)

However, the quality and quantity of bioactive peptides and the source of collagen (e.g., bovine, porcine, marine) may influence outcomes.

Patient considerations

Postmenopausal women and older adults: Declining endogenous collagen synthesis with age contributes to dermal thinning and joint concerns. Supplementation has shown benefit in supporting skin elasticity and bone density in this group. (König 2018)

Athletes or physically active individuals: Preliminary evidence supports reduced joint discomfort and accelerated recovery in response to exercise and occasional overuse. (Liu 2018)

Patients with skin aging concerns: Collagen peptides have been positively associated with dermal matrix synthesis as well as skin hydration and appearance in women aged 35–65. (Proksch 2014)

Allergenicity and source sensitivity: Patients with allergies to fish, bovine, or porcine should avoid collagen derived from those sources. Marine collagen may be unsuitable for individuals with fish allergies.

Collagen quality concerns

Source and identity mislabeling: Studies have found inconsistent labeling of collagen source (e.g., marine vs. bovine), which may pose ethical, religious, or allergenic concerns. (Kržišnik 2024)

Heavy metal contamination: Collagen products, especially marine-derived, may contain unsafe levels of heavy metals such as arsenic or mercury, depending on sourcing and processing. (Kržišnik 2024)

Undeclared ingredients or fillers: FDA warning letters have cited collagen supplement manufacturers for unlisted excipients and failure to comply with cGMPs.

Degradation of active peptides: Improper storage or manufacturing conditions can degrade hydrolyzed collagen peptides, reducing bioactivity. Providers should look for products with validated peptide profiles and stability testing. (Kržišnik 2024)

Lack of standardized dosing: Clinical studies have used varying doses and forms, making direct product comparisons difficult. Products with published bioavailability data or use of branded ingredients with clinical backing (e.g., Verisol®, UC-II®) are more clinically validated. (Proksch 2014)

To learn more about collagen, check out our blog.

Featured Fullscript-tested products

The Fullscript catalog experience allows you to filter Fullscript-tested products. The following are featured high-quality products that meet Fullscript's potency standards.

Product	SKU	Results
Designs for Health Whole Body Collagen™	DFH-WBC390	Micro, heavy metals, and solvents meet USP standards
Designs for Health Arthroben (Unflavored/Unsweetened) 330g	DFH-MFARBUNF	Micro, heavy metals, and solvents meet USP standards

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